UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-34_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1,2,8-14,20-25 and 31-34_ is/are rejected.
7) ☒ Claim(s) _3-7,15-19 and 26-30_ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _3-4_.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 1 and 4 are objected to because of the following informalities:

With respect to claim 1, in lines 9-10, "said file content" lacks antecedent basis.

With respect to claim 4, in lines 2-3, "said network's maximum transmission unit" lacks

antecedent basis.

Applicant is requested to clarify other pending claims for similar objections. Appropriate

correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-2, 8-14, 20-25, and 31-34 are rejected under 35 U.S.C. 102(e) as being

anticipated by Asai et al (US Patent No. 6,760,765 B1). Hereinafter, referred to as Asai.

With respect to claims 1, 12, 13, and 24, Asai discloses (col. 18, lines 31-35) that video

and/or music data (large payload file) comprises a plurality of streaming data 60-1 to 60-p (a

plurality of block files). Each of streaming data 60-1 to 6-p is structured by a plurality of packets

611 to 61q, each of which is a unit of transmission (obtaining a plurality of block files

representing content of a large payload file). Asai discloses (col. 18, lines 44-51 and Fig. 8) that

streaming data 701 is stored in the streaming data storage units 15-1 and 15-2 of the cache

servers 10-1 and 10-2. Similarly, streaming data 702 is stored in the streaming data storage units

15-2 and 15-3 of the cache servers 10-2 and 10-3; streaming data 703 is stored in the streaming

data storage units 15-3 and 15-4 of the cache servers 10-3 and 10-4; and streaming data 704 is

stored in the streaming data storage units 15-4 and 15-1 of the cache servers 10-4 and 10-1

(obtaining a plurality of block files for storage in a plurality of storage devices in a network

node). Asai discloses (col. 19, lines 1-12) that the session management units 11-1 to 11-4 hold

the number of distribution streams of cache server 10-1 to 10-4 using session management tables

53-1 to 53-8 (associating plurality of block files with plurality of storage devices). Asai

discloses in Figs. 8 and 9 that the streaming data stored in the streaming data storage units

corresponds to the session management units (storing plurality of block files in plurality of

storage devices based on associations). Asai discloses in Fig. 10, a diagram showing session

management tables on how the streaming data is accessed from the streaming data storage units

as requested by the terminal (Fig. 1). Herein, the terminal is presented that the streaming data

only stored in a streaming data storage unit and the temrinal has accessed to the video and/or

music as a whole (creating a virtual file, using associations, for presentation to a client requesting

the file content, the virtual file providing an illusion to the client that the file content is

contiguous in the network node).

With respect to claim 2, 14, and 25, Asai discloses in Fig. 7, each of streaming data 60-1

to 6-p is structured by a plurality of packets 611 to 61q (wherein said network comprises a

packet communication network), each of which is a unit of transmission.

With respect to claim 8, 12, 20, and 31, Asai discloses in Fig. 6, a diagram showing an

example of information for a determination operation performed by a cluster control unit 21.

Herein, each cache server stores an optimized number of distributed streams (wherein

associating plurality of block files comprises distributing plurality of block files amongst

plurality of storage devices such that plurality of storage devices are load balanced during

input/output operations).

With respect to claims 9, 12, 21, and 32, Asai discloses (col. 19, lines 1-12) that the

session management units 11-1 to 11-4 hold the number of distribution streams of the cache

servers 10-1 to 10-4 using session management tables 53-1 to 53-8 (storing associations in a file

metadata in plurality of storage devices, associations comprising information on rebuilding the

large payload file from block files).

With respect to claims 10, 22, and 33, Asai discloses in Fig. 1, a distribution system

comprises plurality of terminals, cache servers and content server for distributing requested

content to plurality of cache servers (wherein the network comprises plurality of nodes and

plurality of block files is obtained from other nodes in the network).

With respect to claims 11, 23, and 34, Asai discloses (col. 19, lines 1-12) that the session

management units 11-1 to 11-4 hold the number of distribution streams of the cache servers 10-1

to 10-4 using session management tables 53-1 to 53-8. Asai discloses in Figs. 8 and 9 that the

streaming data stored in the streaming data storage units corresponds to the session management

units. Asai discloses in Fig. 10, a diagram showing session management tables on how the

streaming data is accessed from the streaming data storage units as requested by the terminal

(Fig. 1) (obtaining information about large payload file from file metadata and using information

to construct a virtual representation of large payload file).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-2, 9-11, 13-14, 21-25, and 32-34 are rejected under 35 U.S.C. 102(b) as being

anticipated by Kobayashi et al (US Patent No. 5,905,847). Hereinafter, referred to as Kobayashi.

With respect to claims 1, 13, and 24, Kobayashi discloses in Fig. 2, a block diagram

illustrating how video data are stored in each of the server computer. Herein, each magnetic disk

unit 31a, 32a, 31b, 32b, 31c, and 32c is divided into block units per a certain amount. Herein,

each video program (large payload file) is divided into blocks and distributed over the plurality

of magnetic disk units (obtaining a plurality of block files representing content of a large payload

file for storage in the plurality of storage devices in a network node). Kobayashi discloses in

Fig. 3, an administration table to administrate each configuration of the server computers and the

video programs stored in the magnetic disk units (associating and storing plurality of block files

with plurality of storage devices). Kobayashi discloses in Fig. 3, that the administration table

also contains the client information on accessing the videos. Herein, the video is presented to the

clients as from a single source but in the reality, the blocks of the video are distributed over a

number of magnetic disk units (creating a virtual file, using associations, for presentation to a

client requesting the file content, the virtual file providing an illusion to the client that the file content is contiguous in the network node).

With respect to claims 2, 14, and 25, Kobayashi discloses in Fig. 1, the client-server system comprises network 1 such as Ethernet and ATM (wherein network comprises a packet communication network).

With respect to claims 9, 11, 21, 23, 32, and 34, Kobayashi discloses in Fig. 3, an administration table to administrate each configuration of the server computers and the video programs stored in the magnetic disk units (storing associations in a file metadata in plurality of storage devices, associations comprising information for rebuilding large payload file from the block files).

With respect to claims 10, 22, and 33, Kobayashi discloses in Fig. 1, the client-server system comprises plurality of server computers 2a, 2b, and 2c, wherein each server computer stores a portion of the programs (wherein network comprises a plurality of nodes and plurality of block files is obtained from other nodes in the network).

Allowable Subject Matter

4.   Claims 3-7, 15-19, and 26-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Bommaiah et al (US Patent No. 6,708,213 B1) discloses method for streaming

multimedia information over public networks.

Basani et al (US Patent No. 6,748,447 B1) discloses method and apparatus for scalable

distribution of information in a distributed network.

Kenner et al (US Patent No. 6,799,221 B1) discloses system and method for server-side

optimization of data delivery on a distributed computer network.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The

examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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